


PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference VoiceMessenger	FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/GB2004/001738	International filing date (day/month/year) 22.04.2004	Priority date (day/month/year) 22.04.2003	
International Patent Classification (IPC) or national classification and IPC H04M3/53, H04M3/51, G10L15/28			
Applicant SPINVOX LIMITED ET AL.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 12 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 5 sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input checked="" type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 22.02.2005		Date of completion of this report 08.08.2005	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016		Authorized Officer Schweitz, M Telephone No. +31 70 340-4471	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/001738

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):*

Description, Pages

1, 2, 4-36 as originally filed
3 received on 27.05.2005 with letter of 23.05.2005

Claims, Numbers

1-19 received on 27.05.2005 with letter of 23.05.2005

Drawings, Sheets

1/13-13/13 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☒ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☒ the description, pages 3
- ☒ the claims, Nos. 1, 17, 19
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:
- ☐ the entire international application,
 - ☒ claims Nos. 16
because:
 - ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
 - ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 16 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet
 - ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
 - ☐ no international search report has been established for the said claims Nos.
 - ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
 - the written form ☐ has not been furnished
 - ☐ does not comply with the standard
 - the computer readable form ☐ has not been furnished
 - ☐ does not comply with the standard
 - ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.
 - ☐ See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/001738

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-15, 18
	No: Claims	
Inventive step (IS)	Yes: Claims	14 (page 38), 13, 14 (page 39), 15
	No: Claims	1-12, 18
Industrial applicability (IA)	Yes: Claims	1-15
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item I

Basis of the report

- 1 The amendments as filed with the applicants letter dated 23.05.2005 under Article 19(1) introduce subject-matter which extends beyond the content of the application as filed, contrary to Article 19(2) PCT (see below).
 - 1.1 In claim 1, step (ii) reads: "the **computer** causes the transcribed text message to be sent to the second mobile telephone as the SMS or MMS message".
 - 1.2 Also on the amended page 3, line 18 "operator" has been substituted by "computer".
 - 1.3 There is no support in the application as filed for replacing the "operator" as the entity that causes the transcribed text message to be sent, for a "computer".
 - 1.4 Said amendment of claim 1 will not be taken into account for the examination of novelty and inventive step. Step (ii) of the amended claim 1 will be examined as reading "the **operator** causes the transcribed text message to be sent to the second mobile telephone as the SMS or MMS message".
 - 1.5 The introduction of the new claim 17 is not allowed as there is no mention of the use of the manual transcription system of claim 1 **in conjunction with** an automated voice recognition system.
 - 1.6 The introduction of the new claim 19 is not allowed as it introduces subject-matter which goes beyond the application as filed

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

- 1 The application does not meet the requirements of Article 6 PCT because claim 16 is not clear.
- 1.1 The independent claim 16 is not clear since it fails to define to which feature the term "The method in which" refers. Resulting from this lack of clarity, claim 16 and any dependent claim, insofar as the dependent claim refers to claim 16, are so unclear that an examination as to the merits of novelty and inventive step is not deemed possible.

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1 The following documents are referred to in this communication:

D1: US-A-5 712 901 (MEERMANS DAVID R) 27 January 1998

D2: GB-A-2 334 404 (NOVELERA LIMITED) 18 August 1999

D3: KOUMPIS K ET AL: "An Advanced Integrated Architecture for Wireless
Voicemail Data Retrieval" PROCEEDINGS. INTERNATIONAL CONFERENCE
ON INFORMATION NETWORKING, 31 January 2001, pages 403-410

2 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matters of independent claims 1 and 18 do not meet the requirement of inventive step in the sense of Article 33(3) PCT.

2.1 Document D1 discloses a method for providing voicemail to a wireless device and for forwarding these messages to an operator of a voice-to-text transcription system (document D1, column 5, line 58 - column 6, line 6).

Furthermore, document D1 discloses method steps for playing back the message to a human operator (column 6, lines 18-23) at a console, which can be a general purpose computer (column 4, lines 55-57). Document D1 also discloses the human operator entering the voice message as text into the console (column 6, lines 23-26) and subsequently sending the text message to, for example, a wireless device (column 6, lines 58-63).

2.2 The subject-matter of the amended claim 1 differs from the disclosure in document D1 in that:

a) the originating terminal has been indicated to be a mobile telephone;

b) the wireless device which is the target of the call has been specified to be a mobile telephone; and in that

c) the end-user originator selects an option or function of the first mobile telephone that causes the voice message to be remotely transcribed to a SMS or MMS message for display on the second mobile telephone;

- 2.3 Feature a) is considered trivial in relation to the disclosure in document D1. Said feature merely constitutes the message originators choice of device from where the message is transmitted.
- 2.4 Feature c) can be equated with pressing the disconnect button (i.e. hanging up) after having left the voice message to be transcribed. Therefore, feature c) is considered disclosed in document D1.
- 2.5 The problem solved by feature b), with respect to the disclosure in document D1 (especially with reference to the passage in column 6, lines 58-63), can be defined as how to combine the target device for the voice call (in document D1 the "conventional voice phone") and the target device for the transcribed voice message (in document D1 the "pager") into one and the same device.
- 2.6 The solution to this problem, as presented by the subject-matter of claim 1, is trivial to the person skilled in the art when confronted with the disclosure in document D1, as it can be expected that such a skilled person would be well aware of the capabilities of a mobile telephone.
- 2.7 In addition, in document D3 (see page 403, column 2 and page 404, column 1), which was cited in the International Search Report and which can be found in the field of voice to text transcription of voice messages, an automated system for performing voice to text transcription of voice messages is disclosed. Document D3 further discloses how a voice message for a mobile telephone user is sent in a transcribed form as a text message using a Wireless Application Protocol Push Service. Document D3 further mentions the preferred choice of the authors to

implement their system using SMS as the bearer for WAP.

- 2.8 It is therefore the opinion of this International Preliminary Examination Authority that the skilled person would, either directly, from the disclosure in document D1, or from the combination of the disclosures in documents D1 and D3, arrive at the solution to the problem as defined in 2.4 above and hence, the subject-matter of claim 1 does not involve an inventive step.
- 2.9 It should be observed that non-technical features, such as the initial selection of an originating device by a caller, resulting in a call from a specific type of device (e.g. a mobile telephone), does not constitute support for the presence of an inventive step (Article 33(3) PCT).
- 2.10 Claim 18 is independent and, because of its reference to other claims, actually defines 17 distinct claims (Rule 6.4 PCT).
- 2.11 Document D1 discloses sending the text resulting from the transcription of a voice message to a pager (column 6, lines 60-63) and hence, the subject-matter of claim 18 in its reference to claim 1 does not fulfil the requirement of inventive step (Article 33(3) PCT).
- 3 The subject-matters of dependent claims 2-4 and 6-12 do not meet the requirement of inventive step in the sense of Article 33(3) PCT for the reasons given below.
- 3.1 The subject-matter of claim 2 defines a method in which the transcribed text message has added to it the time and date of receiving the voice message. Such a method is disclosed in document D2 (see page 2, lines 1-6 and figures 2 and 3).
- 3.2 The subject-matters of claims 3 and 4 are considered trivial. A "further voice message", as in claim 3, merely means more of the same and comprises no inventive concept. As for claim 4, the technical features of this claim are well known from the

technical fields of voice messaging or email.

- 3.3 The subject-matters of claims 6-8 are constituted of features which are defined by the content of information presented to the operator. Presentations of information are explicitly excluded from patentability (Rule 39.1(v) PCT) and hence, these features do not support inventive step (Article 33(3) PCT).
- 3.4 The features of claims 9-12 are non-technical features as the method steps that they represent are performed by the operator. According to the same reasoning as in paragraph 2.2, such features do not support the presence of an inventive step.

Re Item VIII.

Certain observations on the international application (clarity).

1 The application does not meet the requirements of Article 6 PCT because claims 1, 5 and 14 are not clear.

1.1 The independent claim 1 is not clear as the opening paragraph of said claim reads: "A method of generating a SMS or MMS text message from a first mobile telephone...". From the remaining part of the claim it is evident that no text message is generated at the sending terminal. Thus, the opening paragraph of claim 1 renders the claim unclear.

Furthermore, claim 1 is not clear as step (e) of said claim reads "the computer receiving as input the original voice message, intelligently transcribed by the operator as a transcribed text message". The wording of said method step implies that the computer receives the transcribed text message. However, in the same step it is initially stated that what is actually received is the original voice message. This leads to a contradiction in the interpretation of the claim.

1.2 The subject-matter in claim 5 does not define how the sought after technical effect is to be achieved. In fact, the claim is merely describing said technical effect and contains no features leading to its implementation. As such, the subject-matter of claim 5 defines only a result to be achieved.

1.3 Claim 14 contains the feature of parsing the transcribed text message. The meaning of this feature is on its own not clear but when the actual examples given in claim 15, are taken into account, it can be understood to mean that an analysis is performed on the data included in the text message and that a part of that data is extracted for further use.

2 The application does not meet the requirements of Article 6 PCT because the set of claims is not concise.

2.1 The reason for the lack of conciseness is a result of the set of claims containing two

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/GB2004/001738

claims 14.

SUMMARY OF THE INVENTION

A method of generating a SMS or MMS text message from a first mobile telephone for receipt by a second mobile telephone, comprises the steps of:

- 5 (a) receiving a voice message at a server, the voice message having been sent from the first mobile telephone by an end-user originator;
- (b) converting the voice message to an audio file format;
- (c) sending or streaming the audio file over a wide area network to a voice to text transcription system comprising a network of computers;
- 10 (d) one of the networked computers playing back the voice message to an operator;
- (e) the computer receiving as input the original voice message, intelligently transcribed by the operator as a transcribed text message;

wherein the method is characterised in that:

- 15 (i) the end-user originator selects an option or function of the first mobile telephone that causes the voice message to be remotely transcribed to a SMS or MMS message for display on the second mobile telephone; and
- (ii) the computer causes the transcribed text message to be sent to the second mobile telephone as the SMS or MMS message.

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Because human operators are used instead of machine transcription, voicemails are converted accurately, intelligently, appropriately and succinctly into text messages (SMS/MMS). The present invention therefore enables a user to send someone a SMS or MMS text message even when that user is unable or unwilling to use the text messaging capabilities of his phone. Text messaging on mobile phones requires you to type on unnaturally small and fiddly alpha-numeric keypads, often with confusing pre-emptive text editors. This often takes quite some time to master and can take 2 to 3 minutes to thumb-type a short message. Instead, with the present invention, the user can speak the message to a remote server, which passes a voice file with the spoken message for transcription to the human based voice transcription system; this system then transcribes the message to SMS or MMS text message format and then sends the text message to the desired recipient.

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CLAIMS

1. A method of generating a SMS or MMS text message from a first mobile telephone for receipt by a second mobile telephone, comprising the steps of:

- 5 (a) receiving a voice message at a server, the voice message having been sent from the first mobile telephone by an end-user originator;
- (b) converting the voice message to an audio file format;
- (c) sending or streaming the audio file over a wide area network to a voice to text transcription system comprising a network of computers;
- 10 (d) one of the networked computers playing back the voice message to an operator;
- (e) the computer receiving as input the original voice message, intelligently transcribed by the operator as a transcribed text message;

wherein the method is characterised in that:

- 15 (i) the end-user originator selects an option or function of the first mobile telephone that causes the voice message to be remotely transcribed to a SMS or MMS message for display on the second mobile telephone; and
- (ii) the computer causes the transcribed text message to be sent to the second mobile telephone as the SMS or MMS message.

2. The method of Claim 1 in which the transcribed text message has added to it the time and date that the voice message was originally received at the server.

3. The method of Claim 1 or 2 in which a further voice message is originated at a mobile telephone or at a landline telephone and a SMS or MMS text message is generated from that further message using the method of Claim 1.

4. The method of any preceding Claim in which the transcribed text message has added to it the caller name and/or number (MSISDN).

5. The method of Claim 4 in which the transcribed text message is displayed on the device as though it was sent directly from an originator of the voice message.

6. The method of any preceding Claim in which the computer does not display to the operator the telephone number associated with the wireless information device.

7. The method of any preceding Claim in which the computer displays to the operator an option to re-route the audio file to a different computer with an operator that is more suited to transcribing the voice message because of linguistic, dialect, or cultural reasons.

8. The method of any preceding Claim in which the computer provides the operator with a searchable list of specialised terms that are relevant to cultural sayings, regular events, sporting events, media events, other kinds of newsworthy events to assist the operator in accurately transcribing those specialised terms.

9. The method of any preceding Claim in which the operator represents the mood of the caller leaving the voice message in the transcribed text message using either a written description or an emoticon.

10. The method of any preceding Claim in which the operator succinctly summarises the voice message.

11. The method of any preceding Claim in which the operator summarises the voice message to fit it the 160 character SMS limit or subsequent concatenated text messages.

12. The method of any preceding claim in which the operator omits from the transcribed text message any hesitations, artefacts, or unnecessary repetitions present in the voice message.

14. The method of any preceding Claim in which the text message is sent to the wireless information device in a format previously specified as appropriate by the user of the device.

13. The method of any preceding Claim in which the originator of the voice message speaks the name of the intended recipient and the operator or a speech recognition

system is able to extract the relevant telephone number of the wireless information device, email address or other address by looking up that name in a web-based address book associated with the originator.

- 5 14. The method of any preceding Claim comprising the further step of parsing the transcribed text message and using the parsed data in an application running on the wireless information device.
- 10 15. The method of Claim 14 in which parsing and using the parsed data involves one or more of the following:
- (a) extracting the phone number spoken allowing it to be used (to make a call), saved, edited or added to a phone book;
 - (b) extracting an email address and allowing it to be used, saved, edited or added to an address book;
 - 15 (c) extracting a physical address and allowing it to be used, saved, edited or added to an address book;
 - (d) extracting a web address (hyperlink) and allow it to be used, edited, saved or added to an address book or browser favourites;
 - (e) extracting a time for a meeting and allow it to be used, saved, edited and added to
20 an agenda as an entry;
 - (f) extracting a number and saving it to one of the device applications;
 - (g) extracting a real noun and providing options to search for it or, look it up on the web (WAP or full browser).
- 25 16. The method in which, for devices that support less than a certain amount of text, there is an initial look up of the text limitations in a database and then an automatic suggestion of appropriate maximum recording time.
- 30 17. The method of any preceding Claim when used in conjunction with an automated voice recognition system to speed up the processing of the audio file.
18. A text message which has been transcribed from a voicemail and is provided to a wireless information device using the method of any preceding Claim 1 – 17.

19. A mobile telephone programmed with an application that enables an end-user originator of a message to cause a SMS or MMS text message to be generated from that message by the performance of the method of Claim 1.